

ISOPODA AND AMPHIPODA COLLECTED BY THE GOUGH ISLAND  
SCIENTIFIC SURVEY

By

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(With 3 figures in the text)

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PREFATORY NOTE

The collection described in this paper was made by the Gough Island Scientific Survey, which worked on Gough Island from 13 November 1955 until 13 May 1956. Attention was largely concentrated on terrestrial biology, and consequently the marine amphipods and isopods described here were all obtained from a small number of collecting stations in the littoral and sublittoral zones near the mouth of The Glen on the east coast of the island. No dredging was undertaken. The material was submitted to the author soon after the return of the Expedition, and this paper was written in 1957. At that time it was hoped that all the Expedition collections might be described in a comprehensive report, but the unequal progress of work on different taxonomic groups, some of which have yet to receive study, has made this impossible. Rather than delay publication still further it has been decided that all results should be presented as they stand, and the belated appearance of this paper is a direct consequence of this decision.

Martin W. Holdgate

INTRODUCTION

The following collection of Isopoda and Amphipoda from the Gough Island Scientific Survey was entrusted to me by Dr. M. W. Holdgate, to whom I express my thanks for the opportunity of studying specimens from this remote and little known locality (Position: 40° 21' S., 09° 55' W.). The Collection is deposited in the British (Natural History), with reference specimens of most species in the South African Museum.

† Dr. K. H. Barnard died on 22 September 1964.

The Isopoda were more interesting than the Amphipoda as was to be expected for Stephensen (1949) had already studied the species of Amphipoda found at Tristan d'Acunha by the Norwegian Expedition. No species of amphipod was collected at Gough Island which was not already known from the sister isle; but not all the 32 (littoral and shallow-water) species recorded from the latter have been found at Gough Island.

Much less is known about the Isopoda of these islands. Only three littoral or shallow-water marine species have been recorded from Tristan, two of them also from Gough Island. One introduced cosmopolitan woodlouse has been long known from Tristan, and one endemic species since the visit of H.M.S. *Challenger*. The *Discovery II* collected one of these marine species from Gough Island; the other two, also the two terrestrial woodlice, have been obtained by the present survey party.

In addition six marine species new to the Tristan-Gough Island area were collected, two of which are described as new species. The rediscovery of the New Zealand *Munna neozelandica* is noteworthy.

The isopodan and amphipodan fauna of these islands has relationships, in general, with South Africa, the Magellanic region, Australasia, and the subantarctic islands. Stephensen (1949) gave some zoogeographical remarks on the amphipods. An analysis for the isopods may be premature, but for what it is worth is as follows (excluding the two deep-water species collected by the *Challenger*):

Endemic on Tristan and/or Gough Island: 3 marine species (*Paridotea apposita* n. sp., *Jaeropsis vibicaria* n. sp., and *Isocladus tristensis*), 1 terrestrial (*Stylo-niscus australis*).

Common to Gough Island and New Zealand: 1 marine species (*Munna neozelandica*).

Common to Gough Island and St. Paul Island: 1 marine species (*Jaeropsis paulensis*).

Common to Tristan and/or Gough Island and South Africa and New Zealand: 2 marine species (*Paridotea ungulata*, *Dynamenella huttoni*).

Common to Tristan and/or Gough Island and other subantarctic regions: 1 marine species (*Iais pubescens*, commensal on Sphaeromids).

Cosmopolitan, introduced: 1 terrestrial species (*Porcellio scaber*).

Mention may be made of one maritime woodlouse whose absence (seemingly) on Tristan and Gough Island is rather remarkable, namely *Deto*. The species of this genus are known from South Africa, South America, Australia, New Zealand and its subantarctic islands, and St. Paul (southern Indian Ocean) (see Chilton, 1915: 437; and Barnard, 1932a: 220). They are large, conspicuous, and abundant. It is, therefore, a fair presumption that the genus does not occur on these islands.

Dr. Sivertsen and Dr. Holthuis are at present studying the isopods collected on Tristan and neighbouring islands by the Norwegian Expedition.

Their results will give a much clearer picture of the fauna of the whole group than the analysis here given based on Gough Island alone.

The preponderance of amphipods in the present collection may perhaps be due, at least in part, to methods of collecting. Kelp is a favourite haunt of these crustaceans, and numerous specimens can usually be obtained from only a few handfuls of weed. Isopods, however, often present a more difficult problem, varying with the type of beach, rock formation, tide range and other factors, not least Neptune's co-operation in curbing the turbulence of the waves.

#### ISOPODA

#### Family **Anthuridae**

##### *Paranthura* sp.

A single juvenile specimen, 4.5 mm. in length, with only 6 peraeon segments and 6 pairs of legs. It has styliform mouth-parts, and the 5th joint of peraeopods 5 and 6 does not underide the 6th. It is therefore probably a species of *Paranthura*.

The colour pattern may prove distinctive when more specimens can be obtained, possibly at Tristan if not at Gough Island. Pale yellowish, a dark patch on front of head, and a dark transverse band across pleon, faint speckling on the peraeon segments, eyes black.

*Locality*: Dell Rocks (A 47. M 54).

#### Family **Sphaeromidae**

##### *Isocladus tristensis* (Leach)

*Exosphaeroma tristense* (Leach) Tattersall, 1913: 882, pl., fig. 1 (juv. ♂ and ♀).

*Isocladus tristensis* (Leach) Barnard, 1914: 384, pl. 33, fig. B (adult ♂); 1955: 62 (transverse profile of body mentioned).

*Localities*: Beach debris, Glen mouth; shore near Base; Dell Rocks; stomach of Soldier fish (A 27. M 1; A 47. M 60; B 5. M 83; B 10. M 88; and B 10. M 90).

A 27. M 1 a lot comprising adult and immature males, ovigerous females, and juveniles. Specimens of the commensal asellid *Iais pubescens* have been removed from some of them.

A 27. M 9 (part) one very juvenile, probably this species.

Previously recorded from Tristan and Gough Island.

A re-examination of *I. magellanensis* Richardson, 1906, is necessary before it can be synonymised with *tristensis*.

##### *Dynamenaella huttoni* (Thomson)

*Dynamenella huttoni* (Thomson) Chilton, 1909: 657. Barnard, 1940: 419 (references).

*Dynamenella kraussi* Barnard, 1914: 415, pl. 35, fig. B.

These specimens agree with South African specimens in convexity of body, and absence of a raised rim on frontal margin of head. Although the surface is

glabrous (Barnard, 1914), it is not polished except in the mid-dorsal line of peraeon segments 2-6; on the head, lateral portions of peraeon, and on pleon and telson it is finely shagreened, and on the dorso-lateral portions of peraeon finely reticulated.

Colour (as preserved) corresponding with that of South African specimens (Barnard, 1914: 417): reddish, with or without a paler stripe (or series of spots) on each side, and indications of paler patches in middle of back.

The size (male 7 mm., female with embryos 5 mm.) is considerably less than the average size of South African specimens.

*Localities*: Dell Rocks and Seal Rocks (A 40. M 25; B 4. M 81; 1504).

### Family Idoteidae

#### *Paridotea ungulata* (Pallas)

*Paridotea ungulata* (Pallas) Hale, 1924: 221, fig. 9 *e, f*. 1929: 320, fig. 325 *b* (side view of 6th and 7th peraeon segments). Sheppard, 1957: 151, fig. 4 *a-e*.

(Fig. 1 *a*)

Tristan d'Acunha and Gough Island. Not taken by the present Survey.

#### *Paridotea apposita* n. sp.

(Fig. 1 *b*)

The parallel-sided body gives this species the appearance of a large form of *fucicola* Barnard (1914: 327, pl. 36, fig. E). In other respects closely resembling *ungulata*.

Side-plates 5 and 6 postero-lateral angle quadrate, 7 a little produced, the angle slightly acute.

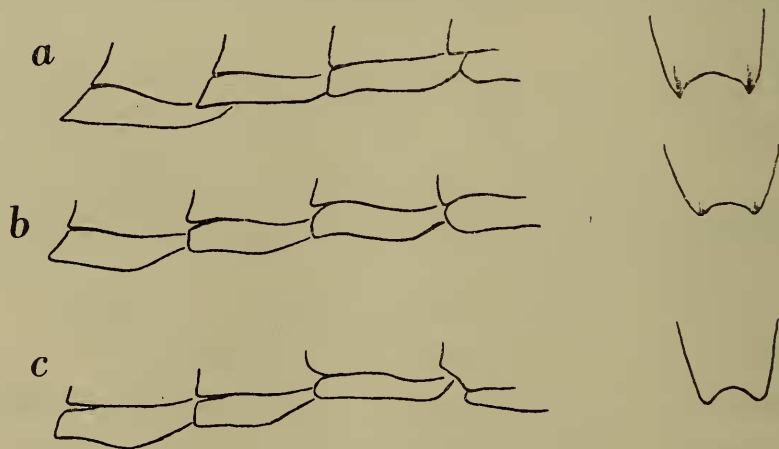


FIGURE 1. *Paridotea*. Side-plates 4-7 and apex of telson of: (a) *ungulata* (Pallas). (b) *apposita* n. sp. (c) *munda* Hale.

Pleo-telson scarcely more than one-third of the total length (*ungulata*: two-fifths), apex shallowly emarginate between the rounded postero-lateral angles, on which a faint keel is traceable. Sternal plates as in *ungulata* (see Barnard, 1914: pl. 36, fig. D, *st. u.*).

Maxilla 1 (of male 30 mm. long) outer plate with 12 spines, with a slender one between the two groups of 6, 4 of the inner group serrulate, but not the innermost shortest one, a seta in middle of plate below bases of spines; inner plate with 4 plumose setae and a simple seta. Maxilliped 7-jointed.

Paraeopods as in *ungulata*; 3 stout serrulate spines on inner margin of 6th joint of peraeopod 1, one in each of peraeopods 2-7; 4th-6th joints of peraeopods 1-6, furry on inner margin in the large male, not furry in females or the smaller specimens.

Uropod peduncle without median keel, a plumose seta at outer (when appendage is folded in) distal corner; length of ramus slightly less than basal width (2: 2.3), outer (when folded) margin more oblique (following the outline of telson) than in *ungulata*, the truncate distal margin relatively narrower.

Pleopod 2 of male, stylet as in *ungulata*.

Colour (as preserved): dull pinkish or reddish.

*Localities*: Beach debris, Glen mouth; stomach of Soldier fish (A 27. M 2) 1 immature, 18 mm.; B 10. M 86 1 ♂ 30 mm., 2 immature 19 and 22 mm.; B 10. M 89 1 ♀ 31 mm.; B 10. M 90 1 ♀ 27 mm., 1 immature 18 mm. (head missing).

The 31 mm. female shows the brood lamellae beginning to develop as tiny lobes, 0.5 mm. long, on segments 2-5; the 27 mm. female shows only slight pits in the positions where the lobes will appear at the next moult. Neither female shows any sign of the anterior peraeon segments broadening.

Thanks to the kindness of Dr. H. M. Hale, then Director of the South Australian Museum, I was able to examine a specimen of *P. munda* Hale 1924, a species which merits comparison with *ungulata* and the Gough Island species. The accompanying figures (fig. 1) of the posterior side-plates and the telsonic apex will illustrate the differences in the three species. Hale's figures of the side-plates (1924 and 1929) do not seem to show the correct shapes, in comparison with the specimen I have seen. This specimen also has a narrower notch at the telsonic apex. (fig. 1 c).

The Cape species *fucicola* Barnard (not figured here) has a narrower telsonic notch than *munda*, side-plates 5 and 6 do not reach as far back as the hind margin of their segments, and the narrowly rounded apex of side-plate 7 extends only slightly beyond its segment.

### Family Jaeridae

#### *Iais pubescens* (Dana)

*Iais pubescens* (Dana) Chilton, 1909: 649. Barnard, 1914: 435, pl. 37, fig. C (typ. err. fig. of plp. 3 has been inverted and labelled 'mnp'. See corrigendum 1916: 106). Nordenstam, 1933: 178, figs. 41 a-c (references). Menzies J. L., Barnard, 1951: 138, pls. 42, 43.

Nordenstam (1933) stated that my figure (Barnard, 1914) of the mandible differed from that given by Stebbing (1900: pl. 38), apparently without noticing that the former was the male, notwithstanding that he himself

examined a male. He was also unaware of the corrigendum relating to the 'mxp'.

Paraeopod 1 triunguiculate (or as worded by Menzies & J. L. Barnard (1951), 'biunguiculate, the inferior claw bifid') as in the other peraeopods.

*Localities*: Stream, at 150 ft. altitude, free-living; Beach debris, Glen mouth, on *Isocladus*; stomach of Soldier fish, on *Isocladus* (A 11. G. 64; A 27. M 1; B 10. M 88).

The occurrence free-living in a stream at 150 ft. altitude is interesting. Chilton (1909: 650) found them free-living at the mouths of fresh water streams in the Sounds on the west coast of New Zealand, often out of range of ordinary high tides. But at 150 ft. altitude the Gough Island individuals would be probably far above even an occasional splash of salt water.

Previously recorded as a commensal on the same Sphaeromid from Tristan.

*Note on South African specimens.* Menzies & J. L. Barnard (1951: 148) have relegated the specimens recorded from the Cape and Durban to 'species inquirendae', and state that the former are 'possibly not *Iais*'. This latter statement may perhaps have been due to the unfortunate typ. err. regarding the 3rd pleopod mentioned above.

I have re-examined Cape material, and find that the 1st peraeopod is triunguiculate as in the other peraeopods, and therefore these specimens can be assigned to *pubescens* as diagnosed by the collaborating authors. The enlargement of the mandibles in fully adult males, of which I have found two additional specimens, is also confirmed. Males with pleopods developed, and thus presumably functional, are much less common than females, and fully adult males with enlarged mandibles are rare.

A single specimen from Durban was in poor condition, and consequently indecisive. Possibly specimens from Natal and from Inhambane, Portuguese East Africa (University of Cape Town Ecological Survey) and from Ceylon may prove referable to *singaporensis* Menzies & J. L. Barnard.

#### Genus JAEROPSIS Koehler

Only the austral species are here considered. According to the position and shape of the uropods two groups of species can be separated (fig. 2). In *marionis*, *patagoniensis*, *intermedius* and *palliseri* they are inserted only a short distance apart, project straight backwards, and their inner margins are straight (or nearly so) and fit closely together. In *paulensis* and *curvicornis* (of Stebbing) they are inserted well apart, fold obliquely inwards, and even when fully folded their apices do not touch one another. The shape of the telsonic apex is correlated: triangular and more or less acute in the first, rounded in the second group. Other taxonomic characters seem to be variously distributed. Chilton's descriptions (1892a and 1912) of *neozeylanicus* are inadequate (see also Hurley, 1957: 19).

	Lateral margin head	telson	2nd anten- na joints of peduncle	Uropod apex of peduncle	Maximilliped 2nd joint of palp
First group					
<i>marionis</i>	serrate	serrate	linear	hooked	?
<i>patagoniensis</i>	smooth	1 tooth	enlarged	hooked	linear
<i>intermedius</i>	serrate (anteriorly)	serrate	enlarged	hooked	lobed
<i>vibicaria</i>	smooth	smooth	enlarged	rounded	lobed
<i>palliseri</i>	smooth	smooth	enlarged	rounded	?
Second group					
<i>curvicornis</i> (Ceylon, S. Africa)	smooth	serrate	enlarged	hooked	lobed
<i>paulensis</i> (St. Paul)	smooth	smooth	enlarged	rounded	?lobed*
<i>paulensis</i> (Gough Is.)	smooth	smooth	enlarged	rounded	lobed

\* Vanhöffen's fig. 59 *f* shows a linear joint but the palp has been displaced, either in dissection or mounting, and consequently no reliance can be placed on the shape, as drawn, being the true shape.

*Jaeropsis paulensis* Vanh.  
(Fig. 2 *b*)

*Jaeropsis paulensis* Vanhöffen, 1914: 531, fig. 59 *a-l*.

Anterior half of head grey, forming a transverse bar, posterior half and upper lip creamy-white, peraeon irrorated with grey, paler than the bar on head, pleo-telson faintly dusted with grey, appendages creamy-white, eyes black.

Males 4-4.5 mm., ovigenous females 3-4.5 mm.

Appears to agree very closely with *paulensis* from St. Paul Island (southern Indian Ocean). The discrepancy in the palp of the maxilliped is probably explainable as suggested in the footnote to the table above.

The apex of the uropod is rather broadly rounded and has no hook, but the inner margin appears to be minutely serrulate.

*Localities*: Dell Rocks; West Point Reef (A 40. M 33; A 47. M 60; B 1. M 69; 1541).

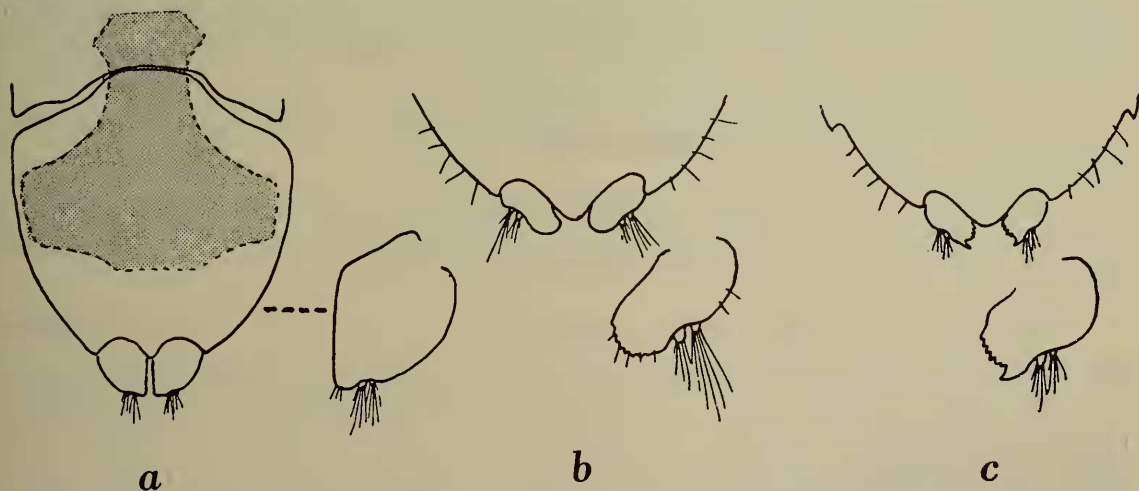


FIGURE 2. *Jaeropsis*. (a) *vibicaria* n. sp., pleo-telson, with uropod further enlarged. (b) *paulensis* Vanh. apex of telson, with uropod further enlarged. (c) '*curvicornis*' (South Africa), apex of telson, with uropod further enlarged.

*Jaeropsis vibicaria* n. sp.

(Fig. 2 a)

Although only a single specimen is present, a new species seems unavoidable; its main taxonomic characters are given in the above table. Nordenstam (1933) had both sexes of *patagoniensis* and *intermedius*, consequently the smooth telsonic margin and lack of apical hook on the uropod cannot be attributed to sexual differences.

Antenna 2, left missing, right mutilated; 4th and 5th peduncular joints enlarged, with scarious outer edge which appears to be crenulate. Maxilliped, lobe of 2nd joint of palp extending only one-third length of 3rd joint; 6 coupling hooks.

Peraeopods and pleopods as for genus.

Uropods inserted close together, directed backwards, their inner margins straight and approximate, apex rounded, with 2-3 setae (?plumose); both rami minute, especially the outer ramus, each with a tuft of setae.

A dark grey triangular patch covering head except hind corners, continued as a mid-dorsal somewhat moniliform stripe on peraeon, expanding into a subtriangular patch on pleo-telson, but not covering the anterior corners or the posterior third; rest of body, and appendages creamy-white, eyes black. 5.5 mm.

*Locality*: Dell Rocks (A 47. M 60). One male.

The colour pattern resembles that figured for *patagoniensis* Richardson (1909: 421, fig.).

*Jaeropsis curvicornis* Stebb. (?non Nicolet)

(Fig. 1 c)

*Jaeropsis curvicornis* (?non Nicolet) Stebbing, 1905: 51, pl. xi, fig. C. Barnard, 1914: 224, pl. 20, fig. C.

Since my description of one male from the Cape, I have seen more material: St. James (False Bay) and Sea Point (Cape Town) (coll. K.H.B.), Lambert's Bay and Saldanha Bay (both on west coast) and Mossel Bay (coll. University of Cape Town Ecological Survey).

The lateral margin of head is smooth, that of pleo-telson serrate, both in juveniles and adults.

The uropod has an apical hooked tooth,\* and the inner distal margin serrulate; each ramus with a tuft of setae. A better figure than my 1914 one is given here.

The colour resembles that of *paulensis*, and the dark crossbar on head offers a ready means of picking out this asellid from other species.

Presumably Stebbing was able to compare his Ceylonese specimen with Nicolet's description and figure; but it would be much more satisfactory to have a full description of specimens from the original Chilean locality. Until

\* Stebbing mistook this for the inner ramus; as also did Miss Richardson. (1909) in her description of *patagoniensis*.



that is available I feel some hesitation in identifying Cape specimens with Nicolet's *curvicornis*, but none in identifying them with the 'curvicornis' of Stebbing.

### Family **Munnidae**

#### *Munna neozelanica* Chilton

*Munna neozelanica* Chilton, 1892a: 267. 1892b: 2, pl. 1. figs. 1-8a, pl. 2, figs. 8b-15, Monod, 1931: 14, figs. 8c, 9 c-e.

*Haliacris neozelanica* (Chilton) Chilton, 1909: 650, fig. 14 a (prp. 1 ♂). 1912a: 132. Stephensen, 1927: 357.

Largest male 4 mm., smallest, with hammer-shaped 1st peraeopod 2.5 mm.; ovig. females 2.5-2.75 mm.

Peraeopod 1 of male, 'hammer' more strongly calcified than the other joints. The other peraeopods setose in male, especially 4th-6th joints of peraeopods 6 and 7.

Chilton and Monod figured the 1st peraeopod of a juvenile male (Monod's specimen 1.5 mm. in length), closely resembling that of the female figured by Chilton. Chilton figured three stages in the development of the 'hammer' (figs. 8b, 8c, 8d). giving the magnification of the figures but without stating the respective lengths of the specimens from which the appendages were removed. At what size, therefore, the change in shape occurs cannot be stated; in the present smallest male, 2.5 mm. in length, the peraeopod has already assumed its final shape, but of course is smaller than in the 4 mm. male. Chilton's largest specimen was 3 mm. in length.

No other Munnid has been described with the 1st peraeopod of the male shaped as in the New Zealand species, and the present specimens agree with the descriptions and figures of Chilton and Monod. Hitherto recorded only from New Zealand (south island) and the subantarctic Auckland and Campbell Islands.

*Localities*: Dell Rocks and shore nearer Base (A 40. M 27; A 47. M 33; B 5. M 84).

### Family **Trichoniscidae**

#### Genus **STYLONISCUS** Dana

Vandel, 1952: 14.

#### *Styloniscus australis* (Dollfus)

(Fig. 3)

*Trichoniscus* (?) *australis* Dollfus, 1890: 6.

*Styloniscus* (?) *australis* (Dollfus), Vandel, 1952: 17.

Sparsely and minutely granulate, chiefly on posterior margins of head and peraeon segments. Eye composed of 3 ocelli in a triangle, contiguous or almost so.

Antenna 2, 5th joint with a basal and a subapical conical spine sometimes

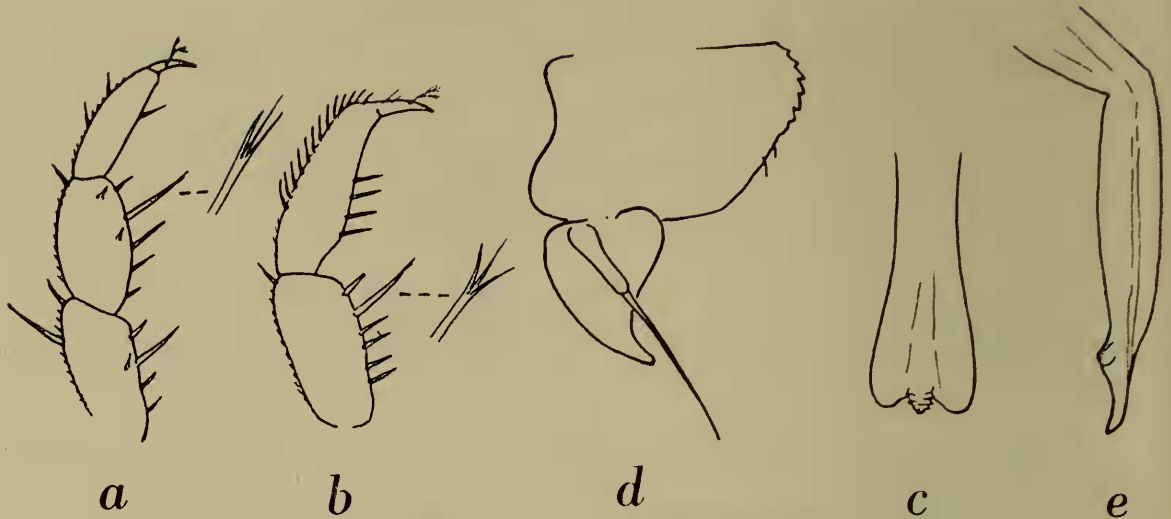


FIGURE 3. *Styloniscus australis* (Dollfus). (a) distal joints of pereopod 1. (b) distal joints of pereopods 6 and 7. (c) penial process. (d) pleopod 1 ♂. (e) pleopod 2 ♂.

1 or 2 smaller intermediate ones, and an apical spine on outer margin; flagellum 3-jointed, with apical tuft of setae, slightly shorter (excluding apical tuft) than 5th joint.

Maxilla 1, outer plate with 9 spines, the inner ones simple, and 2 accessory setae scarcely extending beyond the longest spines and extremely finely setulose, outer margin entire, setose. Maxilliped, basal plate with convex outer margin, apically lobed, palp (outer plate) unjointed, inner plate composed of 1 joint with a small terminal joint, the latter much smaller than in *magellanicus*, cf. *verrucosus* Budde-Lund (1906: pl. 4, figs. 10, 11) and Vandell (1952, fig. 9).

Pereopod 1, 4th joint with one long and one short spine on outer margin, 4 spines on inner margin, the 3rd longest; 5th joint with 5 spines on inner margin, the 4th longest and apically trifid; 6th joint with 2 small spines on outer margin, one on inner margin. No sexual difference.

Pereopods 6 and 7, 5th joint with 5 or 6 spines on inner margin, the subapical one longest and apically trifid; 6th joint with 4 spines on inner margin, a series of about 15 close-set spines on outer margin. No sexual difference.

Penial process with short, conical, wrinkled process in the apical emargination. Pleopod 1 of male, outer corner of basal plate serrulate. Pleopod 2 of male, see fig. 3e. Pleopod 5 of male, exopod grooved.

3.5-4 mm. × 1.3-2 mm. Mottled grey.

*Localities*: Gough Island: various, from Beach debris, Glen mouth, to summit of Expedition Peak, alt. 2950 ft.; and Penguin Island (A 1. G 5; A 2. G 13; A 2. G 23; A 8. G 56 [A 9 on label]; A 12. G 194; S [*sic?* =A] G 88; A 14. G 80; A 27. G 149; A 29. G 171; A 29. G 216; A 30. G 184; A 30. G 191; A 32. G 200; A 35. G 211; A 37. G 226; A 39. G 246; A 41. G 252; A 43. G; 268; B 3. G 305; B 3. G 315; B 8. G 338; B 13. G 373).

## Tristan d'Acunha: Jenny's Watrin.

Vandel (1952: 99 and chart 76) said in regard to the geographical distribution of *Styloniscus*: South Africa (southern coastal area), Madagascar, Mauritius, Patagonia, Australia, Tasmania, New Zealand and southern islands, Crozet Is., and 'perhaps Tristan d'Acunha and Juan Fernandez'. Chilton's 'Marion Island' (*obiter dictum* 1915: 454), is surely a *laps. cal.* for Crozets, which is correctly listed in his *Subantarctic Islands New Zealand* (1909: 799).

The rediscovery of this species, first taken by H.M.S. *Challenger* on Tristan d'Acunha, is therefore welcome.

Family **Porcellionidae***Porcellio scaber* Latr.

*Porcellio tristensis* White, 1847: 99.

*Porcellio scaber* Latr., Barnard, 1932a: 252, fig. 21 a-c.

*Localities*: Gough Island: various, from the Glen up to Michael's Ridge, alt. 1000 ft. (A 1. G 5; A 2. G 13; A 2. G 23; A 4. G 30; A 8. G 53; A 13. G 73; S [*sic* ? = A] 13. G 88; A 14. G 80; A 16. G 84; A 16. G 93; A 21. G 117; A 21. G 119; A 24. G 127; A 27. G 149; A 28. G 164; A 35. G 211; A 37. G 222; A 38. G 236; B 3. G 305; B 11. G 350; B 13. G 365; B 13. G 373; B 14. G 380; B 15/16. G 397).

## Tristan d'Acunha: Jenny's Watrin.

Collected on Tristan by Capt. Dugald Carmichael (1816) and described as a new species by White (1847); later recorded from Tristan by Barnard (1932a).

The Gough Island material comprises uniform slaty-grey and variously mottled specimens; some, e.g. from the Open *Phylica* forest by Lower Watersmeet (A 8. G 53) are very sparsely spotted with grey on a yellowish ground colour.

## AMPHIPODA

Schellenberg, 1931; Barnard, 1932b; Stephensen, 1949; Macnae, 1953.

Family **Lysianassidae***Parawaldeckia kidderi* (S. I. Smith)

*Parawaldeckia kidderi* (S. I. Smith) Stephensen, 1927: 300, fig. 2. Schellenberg, 1931: 6 and 22 (contrasted with *Socarnoides kergueleni*). Stephensen 1949: 5.

Stephensen (1927) gave figures of uropod 3 in the two sexes: in the male it carries a brush of long setae.

*Locality*: Dell Rocks (B 2. M 75).

Recorded from Tristan and neighbouring islands (Nightingale and Inaccessible).

*Acontiosstoma marionis* Stebb.

*Acontiosstoma marionis* Stebbing, 1888: 709, pl. 30. Chilton, 1912b: 462. Barnard, 1932b: 32.  
*Acontiosstoma magellanicum* Stebbing, 1888: 714, pl. 31. (= juv.)

Gough Island, 100 fathoms (Chilton: *Scotia*).

Family **Stenothoidae***Stenothoe sivertseni* Steph.

*Stenothoe sivertseni* Stephensen, 1949: 9, figs. 2, 3. Macnae, 1953: 1026.

*Locality*: from *Macrocystis* kelp (M 25. Misc.).

Previously recorded from Tristan and neighbouring islands.

Family **Pontogeneiidae***Pontogeneia tristanensis* Brnrd.

*Pontogeneia tristanensis* Barnard, 1932b: 199, figs. 118 m, 120. Stephensen, 1949: 15.

*Localities*: Midshipman Rock, Dell Rocks, outer fringe kelp, kelp between Reef Point and Dell Rocks (A 42. M 34; A 44. M 34; A 44; B 1. M 65; BM. M 77; M. 25. Misc.).

Previously recorded from Tristan and neighbouring islands.

*Paramoera tristanensis* Brnrd.

*Paramoera tristanensis* Barnard, 1932b: 209, figs. 118 k, 127. Stephensen, 1949: 16. Macnae, 1953: 1026.

*Localities*: Dell Rocks and Half-way Cave (A 40. M 26; A 47. M 42; B 4. M 80; B 5. M 82).

Previously recorded from Gough Island, Tristan and neighbouring islands.

Family **Gammaridae***Melita tristanensis* n. sp.

*Melita gayi* (non Nicolet) Stephensen, 1949: 22. Macnae, 1953: 1027.

Agreeing with Stephensen's Tristan material in having no medio-dorsal tooth on pleon segment 4, and thus disagreeing with the South African *orgasmos* Barnard, 1940. Stephensen said pleon segment 5 had 'one pair of small subdorsal teeth'; the Gough Island specimens resemble *orgasmos* in having a pair of denticles with a seta between them *on each side* of the median line. I think one may assume that the two denticles in the Tristan specimens were actually double.

Side-plate 1 strongly expanded forwards as in *orgasmos*, but postero-inferior angle of pleon segment 3 quadrate with a small point (as in *palmata*).

In view of these conflicting characters it is difficult to decide what specific name to attach to the Tristan-Gough Island specimens. Schellenberg (1931: 203) separated *gayi* Nicolet (incl. *inaequistylis* auct.) from the northern *palmata* mainly because of lack of material for comparison; he made no mention of such

critical characters as the dorsal dentation of the pleon, or the shape of the hind corner of pleon segment 3.

In 1940 (p. 454) I revised my opinion as to the identity of '*inaequistylis*' and its possible synonyms, and distinguished two species *orgasmos* Barnard and *zeylanica* Stebbing in the South African material previously recorded as *inaequistylis*. I consider it desirable to recognize distinct species in regions which have been separated for a considerable period, until material from each region has been thoroughly examined.

Therefore, because no detailed description has yet been given of the South American *gayi*, I attach a new name to the Tristan-Gough Island specimens.

A further question is: which characters are critical for defining the species? Typically *orgasmos* has a dorsal tooth on pleon segment 4, but sometimes (Barnard, 1940: 455) this is absent!

Colour (as preserved): purplish-brown, eyes black.

*Locality*: Dell Rocks (A 40. M 26; A 47. M 60).

Previously recorded from Tristan and neighbouring islands.

#### Family **Talitridae**

##### *Orchestia platensis* Kröyer

*Orchestia platensis* Kröyer, Stephensen, 1944: 57, figs. 15, 16. 1949: 25. Macnae 1953: 1027.

*Orchestia tristensis* (Leach MS.) White, 1847: 86.

*Locality*: Beach, opposite Hut (A 13. G 92).

Previously recorded from Tristan and Inaccessible Island.

##### *Orchestia scutigerula* (Dana)

*Orchestia scutigerula* (Dana) Stephensen, 1949: 26, figs. 11, 12; Macnae, 1953: 1027.

*Localities*: Penguin and Midshipman Islands (A 38. G 232; A 39. G 242; A 39. G 247; A 42. G 261).

Previously recorded from Nightingale and Inaccessible Islands.

##### *Hyale hirtipalma* (Dana)

*Hyale hirtipalma* (Dana), Stephensen, 1949: 30, fig. 13.

Only one Male (in B2. M 75) has the strongly setose flagellum of antenna 2 (cf. Barnard, 1916: 234); *per contra* the hand of gnathopod 2 lacks the characteristic brush of setae.

*Localities*: Beach debris, Glen mouth; Dell Rocks, Penguin Island, Halfway Cave, West Point Reef (A 27. M 11; A 28. M 18; A 28. M 19; B 2. M 75; B 4. M 79; B 5. M 82; 1541; 1543).

Previously recorded from Tristan and neighbouring islands.

*Hyale grandicornis* (Kröyer)

*Hyale grandicornis* (Kröyer), Chilton, 1912b: 508. Stephensen, 1949: 33. figs. 14, 15. Macnae, 1953: 1028.

*Localities*: Glen mouth and Dell Rocks (A 28. M 19; B 1. M 72; B 2. M 75).

Previously recorded from the shore of Gough Island by Chilton (1912), and by Stephensen (1949) from Tristan and Nightingale Island.

*Allorchestes tristanensis* Macnae

*Allorchestes tristanensis* Macnae, 1953: 220.

One immature female in the *Discovery* collection was assigned to this genus, and later collecting has confirmed its occurrence on Tristan. Stephensen (1949) regarded specimens as a variety of *Hyale grandicornis*, but Macnae (1953) has described them as a species of *Allorchestes*, commenting on the slight difference between the two genera.

Family **Aoridae***Aora typica* Kröyer

*Aora typica* Kröyer, Stephensen, 1949: 41, fig. 18. Macnae, 1953: 1032.

*Locality*: Dell Rocks (A 40. M 26; B 1. M 69).

Previously recorded from Tristan and neighbouring islands.

Family **Photidae***Eurystheus remipes* Brnrd.

*Eurystheus ?afer* Stebbing, Chilton, 1912b: 510, pl. 2, figs. 30-34.

*Eurystheus remipes* Barnard, 1932b: 229, fig. 143.

Gough Island, trawled in 100 fathoms (Chilton: *Scotia*).

Falkland Islands, 105-115 metres (Barnard: *Discovery*).

Family **Ampithoidae***Ampithoe brevipes* (Dana)

*Ampithoe brevipes* (Dana), Barnard, 1932b: 239, fig. 150. Stephensen, 1949: 44.

*Locality*: Dell Rocks, from kelp (A 44. M 34; B 1. M 69).

Previously recorded from Tristan and neighbouring islands.

Family **Jassidae***Ischyrocerus longimanus* (Haswell)

*Ischyrocerus anguipes* var. *longimanus* (Haswell), Barnard, 1932b: 243.

*Ischyrocerus longimanus* (Haswell), Stephensen, 1949: 45 (references). Macnae, 1953: 1032.

*Locality*: from kelp (M 25 Misc.; M 27).

Previously recorded from Tristan and neighbouring islands.

Stephensen (1949) considered that the true *anguipes* is confined to the northern hemisphere.

Family **Caprellidae***Caprella acutifrons* Latr.

*Caprella acutifrons* Latr., Barnard, 1932b: 300. Macnae, 1953: 1032.

*Caprella acutifrons* var. *natalensis* Mayer, Stephensen, 1949: 53.

*Localities*: from kelp (A 44. M 35; A 44. M 36; A 44 outer fringe kelp; M 24. Misc.; M 26; M 27).

Previously recorded from Tristan and neighbouring islands.

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## SUMMARY

An account is given of the Isopoda and Amphipoda of Gough Island (40° 21' S., 09° 55' W.) based on the collections of the Gough Island Scientific Survey, 1955-1956. Eleven species of Isopoda and sixteen species of Amphipoda are recorded, including six marine species of Isopoda new to the Tristan-Gough area. Two new species of Isopoda, *Paridotea apposita* and *Jaeropsis vibicaria*, and one new species of Amphipoda, *Melita tristanensis*, are described.

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